



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA-HQ-OAR-2013-0290; FRL-9982-43-OAR]

RIN 2060-AT25

National Emission Standards for Hazardous Air Pollutants for Clay Ceramics

Manufacturing

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: This action proposes amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Clay Ceramics Manufacturing. The proposed amendments are in response to a petition for reconsideration filed by industry stakeholders on the final rule promulgated on October 26, 2015, as well as our review of the 2015 rule with respect to other issues raised by stakeholders. This action proposes to revise the temperature monitoring methodology used to demonstrate continuous compliance with the dioxin/furan (D/F) emissions limit of the final rule. In addition, we are proposing to address concerns raised by industry stakeholders regarding visible emissions (VE) monitoring of tunnel kiln stacks for continuous compliance with particulate matter (PM) and mercury (Hg) emission limitations. This action also proposes to amend the requirements for weekly visual inspections of system ductwork and control device equipment for water curtain spray booths. Lastly, this action proposes to amend the NESHAP to include provisions for emissions averaging and make technical corrections.

DATES: *Comments.* Comments must be received on or before **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

Public hearing. If anyone contacts us requesting a public hearing on or before **[INSERT DATE 5 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, we will hold a hearing. Additional information about the hearing, if requested, will be published in a subsequent **Federal Register** document and posted at <https://www.epa.gov/stationary-sources-air-pollution/brick-and-structural-clay-products-national-emission-standards>. See **SUPPLEMENTARY INFORMATION** for information on registering and attending a public hearing.

ADDRESSES: *Comments.* Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2013-0290, at <https://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. See **SUPPLEMENTARY INFORMATION** for detail about how the EPA treats submitted comments. Regulations.gov is our preferred method of receiving comments. However, the following other submission methods are also accepted:

- *Email:* a-and-r-docket@epa.gov. Include Docket ID No. EPA-HQ-OAR-2013-0290 in the subject line of the message.
- *Fax:* (202) 566-9744. Attention Docket ID No. EPA-HQ-OAR-2013-0290.
- *Mail:* To ship or send mail via the United States Postal Service, use the following address: U.S. Environmental Protection Agency, EPA Docket Center, Docket ID No. EPA-HQ-OAR-2013-0290, Mail Code 28221T, 1200 Pennsylvania Avenue, NW, Washington, DC 20460.
- *Hand/Courier Delivery:* Use the following Docket Center address if you are using express mail, commercial delivery, hand delivery, or courier: EPA Docket Center, EPA WJC West Building, Room 3334, 1301 Constitution Avenue, NW, Washington, DC

20004. Delivery verification signatures will be available only during regular business hours.

FOR FURTHER INFORMATION CONTACT: For questions about this proposed action, contact Mr. Brian Storey, Sector Policies and Programs Division (D243-03), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-1103; fax number: (919) 541-4991; and email address: *storey.brian@epa.gov*.

SUPPLEMENTARY INFORMATION:

Public hearing. Please contact Ms. Aimee St. Clair at (919) 541-1063 or by email at *stclair.aimee@epa.gov* to request a public hearing, to register to speak at the public hearing, or to inquire as to whether a public hearing will be held.

Docket. The EPA has established a docket for this rulemaking under Docket ID No. EPA-HQ-OAR-2013-0290. All documents in the docket are listed in Regulations.gov. Although listed, some information is not publicly available, *e.g.*, confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy. Publicly available docket materials are available either electronically in Regulations.gov or in hard copy at the EPA Docket Center, Room 3334, EPA WJC West Building, 1301 Constitution Avenue NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the EPA Docket Center is (202) 566-1742.

Instructions. Direct your comments to Docket ID No. EPA-HQ-OAR-2013-0290. The EPA's policy is that all comments received will be included in the public docket without change

and may be made available online at <https://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be CBI or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through <https://www.regulations.gov> or email. This type of information should be submitted by mail as discussed below.

The EPA may publish any comment received to its public docket. Multimedia submissions (audio, video, *etc.*) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the Web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www2.epa.gov/dockets/commenting-epa-dockets>.

The <https://www.regulations.gov> website allows you to submit your comment anonymously, which means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to the EPA without going through <https://www.regulations.gov>, your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, the EPA recommends that you include your name and other contact information in the body of your comment and with any digital storage media you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. Electronic files should not include special characters or any form of encryption and be

free of any defects or viruses. For additional information about the EPA's public docket, visit the EPA Docket Center homepage at <https://www.epa.gov/dockets>.

Submitting CBI. Do not submit information containing CBI to the EPA through <https://www.regulations.gov> or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information on any digital storage media that you mail to the EPA, mark the outside of the digital storage media as CBI and then identify electronically within the digital storage media the specific information that is claimed as CBI. In addition to one complete version of the comments that includes information claimed as CBI, you must submit a copy of the comments that does not contain the information claimed as CBI directly to the public docket through the procedures outlined in *Instructions* above. If you submit any digital storage media that does not contain CBI, mark the outside of the digital storage media clearly that it does not contain CBI. Information not marked as CBI will be included in the public docket and the EPA's electronic public docket without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 Code of Federal Regulations (CFR) part 2. Send or deliver information identified as CBI only to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attention Docket ID No. EPA-HQ-OAR-2013-0290.

Preamble Acronyms and Abbreviations. We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

BSCP	Brick and Structural Clay Products
CAA	Clean Air Act
CBI	Confidential Business Information
CFR	Code of Federal Regulations
D/F	dioxins/furans
EPA	U.S. Environmental Protection Agency

HAP	hazardous air pollutant(s)
Hg	mercury
HON	Hazardous Organic NESHAP
lb	pounds
NAICS	North American Industry Classification System
NESHAP	national emission standards for hazardous air pollutants
NTTAA	National Technology Transfer and Advancement Act
OAQPS	Office of Air Quality Planning and Standards
OMB	Office of Management and Budget
PM	particulate matter
PRA	Paperwork Reduction Act
RFA	Regulatory Flexibility Act
UMRA	Unfunded Mandates Reform Act
VE	visible emissions

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J. National Technology Transfer and Advancement Act (NTTAA)

K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

I. General Information

A. Does this action apply to me?

Table 1 of this preamble lists the NESHAP and associated regulated industrial source categories that are the subject of this proposal. Table 1 is not intended to be exhaustive, but rather provides a guide for readers regarding the entities that this proposed action is likely to affect. The proposed amendments, once promulgated, will be directly applicable to the affected sources. Federal, state, local, and tribal government entities would not be affected by this proposed action. As defined in the *Initial List of Categories of Sources Under Section 112(c)(1) of the Clean Air Act Amendments of 1990* (see 57 FR 31576, July 16, 1992) and *Documentation for Developing the Initial Source Category List* (see EPA-450/3-91-030), the Clay Products Manufacturing source category, as originally listed, included any facility engaged in manufacturing of clay products such as brick, vitrified clay pipe, structural clay tile, and clay refractories. The Clay Products Manufacturing source category has since been replaced by the Brick and Structural Clay Products (BSCP) Manufacturing source category and the Clay Ceramics Manufacturing source category (see 67 FR 47894, July 22, 2002).

Table 1—NESHAP and Industrial Source Categories Affected by this Action

Category	NAICS code ¹	Examples of potentially regulated entities
Industry....	327120	Ceramic wall and floor tile manufacturing facilities (Clay Ceramics Manufacturing NESHAP).
	327110	Vitreous plumbing fixtures (sanitaryware) manufacturing facilities (Clay Ceramics Manufacturing NESHAP).
Federal government...	...	Not affected.
State/local/tribal government...	...	Not affected.

¹ North American Industry Classification System

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this action is available on the Internet. Following signature by the EPA Administrator, the EPA will post a copy of this proposed action at <https://www.epa.gov/stationary-sources-air-pollution/brick-and-structural-clay-products-national-emission-standards>. Following publication in the **Federal Register**, the EPA will post the **Federal Register** version of the proposal and key technical documents at this same website.

A redline version of the regulatory language that incorporates the proposed changes in this action is available in the docket for this action (Docket ID No. EPA-HQ-OAR-2013-0290).

II. Background

A. What is the statutory authority for this action?

The statutory authority for this action is provided by sections 112 and 307(d)(7)(B) of the Clean Air Act (CAA) as amended (42 U.S.C. 7412 and 7607(d)(7)(B)).

B. What actions preceded these proposed amendments?

The initial NESHAP for Clay Ceramics Manufacturing was published in the **Federal Register** on May 16, 2003 (68 FR 26690), and codified at 40 CFR part 63, subpart KKKKK, pursuant to section 112 of the CAA. These standards were challenged and subsequently vacated by the United States Court of Appeals for the District of Columbia Circuit in 2007. See *Sierra Club v. EPA*, 479 F.3d 875, 876 (D.C. Cir. 2007). Following the 2007 vacatur of the 2003 rule, the EPA collected additional data and information to support new standards for the clay ceramics industry. This information is contained in the docket at <https://www.regulations.gov> (see Docket ID No. EPA-HQ-OAR-2013-0290). On December 18, 2014, the EPA proposed new NESHAP

for Clay Ceramics Manufacturing (79 FR 75622). The EPA received additional data and comments during the public comment period. These data and comments were considered and analyzed and, where appropriate, revisions to the NESHAP were made. The NESHAP for Clay Ceramics Manufacturing was finalized on October 26, 2015 (80 FR 65470).

On December 23, 2015, Kohler Company (Kohler) petitioned the EPA for reconsideration of the final rule for Clay Ceramics Manufacturing (Docket Item No. EPA-HQ-OAR-2013-0290-0316). In this action, we are proposing revisions to the Clay Ceramics Manufacturing NESHAP based on information provided by Kohler in their petition, information collected by the EPA subsequent to the reconsideration request, and information collected by the EPA subsequent to our reconsideration request response. The intent of these proposed amendments is to provide some flexibility to the clay ceramics manufacturing industry, while maintaining the emissions and operational standards of the NESHAP.

III. Summary of the Proposed Amendments

The EPA is proposing the following amendments to 40 CFR part 63, subpart KKKKK, in response to Kohler's petition for reconsideration on the October 26, 2016, final rule (80 FR 65470):

- Revise the temperature monitoring methodology used to demonstrate continuous compliance with the D/F emissions limits from sanitaryware first-fire tunnel kilns.
- Provide an alternative to the monitoring provisions for VE from tunnel kiln exhaust stacks.
- Amend the requirements for weekly visual inspections of system ductwork and control device equipment for water curtain spray booths.

- Define cooling stacks in the rule and differentiate cooling stacks from kiln exhaust stacks for compliance purposes.
- Include provisions to allow emissions averaging for emissions from existing tunnel kilns and glaze spray booths and make associated revisions to the definition of affected source and recordkeeping and reporting requirements.

The rationale for these proposed amendments is provided in section IV of this preamble.

This action is limited to the specific issues raised in the petition for reconsideration, plus some minor technical corrections. There are no changes to emission limits in the October 2015 final rule as a result of these proposed amendments.

IV. Rationale for the Proposed Amendments

A. Temperature Monitoring of Tunnel Kilns

The December 18, 2014, action proposed to require continuous monitoring of kiln temperature as a performance parameter for demonstrating compliance with the D/F emission limitations. In their public comments, Kohler indicated that the proposed temperature limitation failed to account for the normal temperature variations that occur during operation of a kiln. The October 26, 2015, final rule changed the performance parameter from a minimum kiln temperature operating limit to a maximum stack temperature operating limit. In our response to Kohler's December 23, 2015, petition for reconsideration, we indicated that we would grant reconsideration of the temperature monitoring requirement (Docket Item No. EPA-HQ-OAR-2013-0290-0319).

Subsequently, the EPA reviewed new data provided by Kohler regarding annual kiln operating temperatures (see Docket Item No. EPA-HQ-OAR-2013-0290-0340). The data indicate that there is variability in kiln operating temperatures based on kiln load and other

factors. During production of sanitaryware products, the tunnel kiln operating temperature is used as the primary operating parameter to maximize quality assurance of the product (minimal defects), while minimizing fuel usage. In addition, there are periods, based on the number of products being run through the kiln (kiln load), and the variation of types of products included in each load, where the temperature set point must be adjusted to control the “heat work” through the kiln. Heat work is defined as the temperature and time factors that allow the sanitaryware body and glaze coatings to sinter, melt, flow, and fuse. The adsorption rate of the fired product (porosity) is determined by the heat work (see Docket Item No. EPA-HQ-OAR-2013-0290-0342).

Based on this information gathered during our discussions with Kohler, we are proposing to amend the compliance demonstration requirements for sanitaryware first-fire tunnel kilns where no air pollution control devices are installed. In this scenario, we propose to require the affected sources to monitor kiln temperature during an initial D/F compliance test, consisting of three 4-hour test runs, for a total of 12 hours. From this 12-hour block of time, consisting of 1-hour increments, the affected sources would calculate two values: (1) the standard deviation of the 12 1-hour temperature measurements, and (2) 1 percent of the 12-hour block average. The affected sources would determine which of the two values would provide the greatest variability (*i.e.*, the highest value) and would then *add* this value to the 12-hour block average measured during the compliance test. This value would become the *maximum* temperature at which the kiln would be allowed to operate during normal operations. We are setting a maximum operating limit because, due to variability, kiln operating temperatures at sanitaryware facilities sometimes fall below the value observed during the compliance test. Temperatures have also been found to fall in the duct.

Under this scenario, the affected sources would be required to monitor 12-hour averages of their kiln during normal operations and demonstrate compliance by comparing these 12-hour averages to the value calculated during the D/F compliance test. This should allow variability of the hourly temperature fluctuations as a 12-hour block average and, additionally, provide variability by having multiple options for calculating the kiln variability into the operating limit.

In this proposed amendment to the rule, owners or operators would be required to maintain records of performance tests and continuous compliance data as is required in the October 2015 final rule and would be required to comply with the corresponding reporting requirements of the October 2015 final rule. Accordingly, in this action, the EPA is proposing to amend Table 2 to 40 CFR part 63, subpart KKKKK, to include the revised operating limit, amend Table 4 to specify the requirements for establishing the operating limit during the D/F compliance test, and amend Tables 6 and 7 to specify the associated initial and continuous compliance requirements, respectively. These amendments to the rule only apply to sanitaryware first-fire tunnel kilns. The D/F compliance requirements of all other emission sources regulated by the rule remain unchanged.

We are also requesting comment on whether to consider an alternative temperature monitoring requirement. Similar to the previous scenario, the affected sources would monitor kiln temperature during the initial D/F compliance test, calculate both the standard deviation of the 12 1-hour temperature measurements and 1 percent of the 12-hour block average, and decide which of the two values would provide the greatest variability (*i.e.*, the highest value). However, this second scenario has the affected sources *subtract* this value from the 12-hour block average measured during the compliance test to determine the *minimum* temperature at which the kiln would be allowed to operate during normal operations. Similar to the previous scenario, this

alternative would require the affected sources to monitor 12-hour averages of their kiln during normal operations and demonstrate compliance by comparing these 12-hour averages to the value calculated during the D/F compliance test.

The proposed amendments do not change the requirement for affected facilities operating sanitaryware first-fire tunnel kilns to demonstrate compliance with the D/F emission limit through repeat 5-year stack testing. The proposed amendments to the rule provide affected facilities without air pollution control devices with a revised means to demonstrate continuous compliance at all times, including those times where facilities must adjust kiln temperatures to control the heat work through the kiln. If an affected facility determines through continuous kiln temperature monitoring that they cannot demonstrate compliance using the method proposed, they would be required to maintain kiln temperatures that demonstrate compliance until such time that additional stack testing could be performed and a new temperature threshold determined.

B. Visible Emissions Monitoring of Tunnel Kiln Exhaust

In its petition for reconsideration, Kohler explained the basis for its position that VE monitoring is not a useful parameter to assess kiln operations. In addition, Kohler explained that process errors that would potentially lead to an increase in VE from a kiln would more readily be identified through one of multiple parameters monitored continuously by the kiln operator. In our response to this request, we indicated that, although we were denying the reconsideration request on this issue, we would evaluate any additional information provided by Kohler and determine whether any further action would be warranted (see Docket Item No. EPA-HQ-OAR-2013-0290-0319).

In a subsequent meeting, the EPA and Kohler discussed alternatives to the VE testing requirement in the final rule. The information provided by Kohler (see Docket Item No. EPA-HQ-OAR-2013-0290-0339) supports the conclusion that monitoring kiln temperature is a more accurate and sensitive parameter in determining times when the PM emissions may be increased, rather than periodically monitoring VE from the kiln stack. As a result, the EPA is proposing to include an alternative that would require the source to first take the necessary steps to maintain the temperature profile of each tunnel kiln. For any incidence where a kiln exceeds its normal operating temperature profile, the source would then be required to perform VE observations at the stack of the affected kiln according to the procedures of EPA Method 22. Accordingly, in this action, the EPA is proposing to amend 40 CFR 63.8620(e) to include revised procedures for demonstrating continuous compliance to include the requirement for facilities to maintain normal kiln temperature, and only perform VE observations when the kiln temperatures are sporadic or out of the normal range of operation. Additionally, the EPA is proposing to amend Tables 2 and 7 to 40 CFR part 63, subpart KKKKK, to specify the operating limits and continuous compliance requirements, respectively.

C. Weekly Visual Inspections of Water Curtain Spray Booths

Regarding the issue of visual inspections for system ductwork and control device equipment for water curtain spray booths, Kohler and the EPA have discussed the weekly inspection requirement. Kohler representatives explained that current maintenance procedures eliminate the need for the weekly inspections. Kohler's operators routinely conduct preventative maintenance on the water curtain control, such as regular periodic fan maintenance, as well as a weekly wash-out. They also explained how their current procedures ensure that they become aware in a relatively short period of time if there is an issue with the water curtain or the

ductwork, as they can see if particulates or other impurities are getting into the glaze that has been sprayed onto a piece of ware. If this were to occur, the operator would stop the glazing operations to fix the issue. Kohler provided the EPA additional information about the quarterly preventative maintenance that they conduct, available in Docket Item No. EPA-HQ-OAR-2013-0290-0331. Kohler also indicated that ductwork inspections do not have any value, since the water is the control, and, therefore, any air in the ductwork is already controlled (see Docket Item No. EPA-HQ-OAR-2013-0290-0336).

During several visits to the Kohler facility in Spartanburg, South Carolina (see Docket Item Nos. EPA-HQ-OAR-2013-0290-0005, 0331, and 0341), the EPA observed the configuration of a typical spray booth, and the ductwork associated with the booth. From the observations, it was apparent that the booth operator would indeed be able to see if particulates or other impurities were getting into the glaze that has been sprayed onto a piece of ware, and that the requirement for weekly inspections would not be required based on the configuration of the booth.

Based on its evaluation of the additional data, and after observing the water curtain spray booth operations at the Kohler facility in Spartanburg, South Carolina, the EPA is proposing to remove the weekly visual inspection requirement from the rule but retain the other two monitoring requirements (daily inspections to verify the presence of water flow to the wet control system and annual inspections of the interior of the control equipment). Accordingly, in this action, the EPA is proposing to amend Table 2 to 40 CFR part 63, subpart KKKKK, to remove the weekly visual inspections part of the operating limit for glaze spray operations equipped with a water curtain and amend Table 7 to remove the associated continuous compliance requirement.

D. Cooling Stacks

In its response to Kohler's petition that cooling stacks to be tested at sanitaryware manufacturing facilities should be limited to those with an oxygen content at or below 20.4 percent, the EPA noted that the value of 20.5 percent that the EPA finalized was based on the 20.5 percent threshold concentration provided by Kohler in an email to the EPA clarifying its testing proposal, and this email was present in the docket at proposal (see Docket Item No. EPA-HQ-OAR-2013-0290-0119). At the time, the EPA concluded that a reconsideration on this issue was not warranted pursuant to CAA section 307(d)(7)(B) and denied the reconsideration petition on this issue. Notwithstanding this denial, the EPA stated that it would evaluate any additional information provided by the petitioner and determine whether any further action is warranted (see Docket Item No. EPA-HQ-OAR-2013-0290-0319).

In a subsequent meeting, Kohler and the EPA discussed Kohler's request to revise this aspect of the rule and options for any such revision, which included changing the oxygen content in the Clay Ceramics Manufacturing NESHAP from 20.5 percent to 20.4 percent or adding a definition for "cooling stack" that would exclude it from applicability (see Docket Item No. EPA-HQ-OAR-2013-0290-0331). As a result of this and later contacts (see Docket Item Nos. EPA-HQ-OAR-2013-0290-0335 through 0338), the EPA has a better understanding of the purpose and operations of the cooling stacks. Based on this additional knowledge, the EPA is proposing to revise 40 CFR 63.8595(c) to specifically exclude cooling stacks from stack testing at sanitaryware manufacturing facilities, revise 40 CFR 63.8665 to include a definition for "cooling stack" and, for additional clarity, include a definition for "products of combustion (POC) stack," which is the type of stack that would be tested.

E. Emissions Averaging

In its petition for reconsideration, Kohler requested that the EPA allow the use of emissions averaging as a compliance option in the Clay Ceramics Manufacturing NESHAP for existing tunnel kilns and glaze spray booths. Initially, in the December 18, 2014, proposed rule (79 FR 75649), the EPA had requested public comment on the use of emissions averaging in the BSCP Manufacturing NESHAP. In that 2014 proposal, we also noted that emissions averaging would not be applicable to new sources and could only be used between existing tunnel kilns in the same size subcategory (79 FR 75649). In this action, we are proposing amendments to 40 CFR 63.8595 in the Clay Ceramics Manufacturing NESHAP that would include alternative emissions averaging limits for the following:

- PM and Hg, in units of pounds per ton (lb/ton) of fired product for existing floor tile roller kilns;
- PM and Hg, in units of lb/ton of fired product for existing wall tile roller kilns;
- PM and Hg, in units of lb/ton of greenware fired for existing first-fired sanitaryware tunnel kilns;
- PM and Hg, in units of lb/ton of first-fired glaze sprayed (dry weight basis) for existing tile glaze lines with glaze spraying; and
- PM, in units of lb/ton of first-fire glaze sprayed (dry weight basis), for existing sanitaryware manual, spray machine, or robot glaze applications.

As stated in the December 18, 2014, proposed rule, the EPA has concluded that it is permissible under the appropriate circumstances to establish within a NESHAP a unified compliance regimen that permits averaging within an affected source across individual affected units subject to the standard under certain conditions (79 FR 75650). In addition, averaging

across affected units is permitted only if it can be demonstrated that the total quantity of any hazardous air pollutant (HAP) will not be greater under the averaging mechanism than it could be if each individual affected unit complied separately with the applicable standard. The conditions required for emissions averaging include: (1) No averaging between different types of pollutants; (2) no averaging between sources that are not part of the same affected source; (3) no averaging between individual sources within a single major source if the individual sources are not subject to the same NESHAP; and (4) no averaging between existing sources and new sources.

In this action, we are proposing that emissions averaging would be allowed if they meet the following requirements. First, emissions averaging would only be permitted between individual sources at a single existing affected source and would only be permitted between individual sources subject to the Clay Ceramics Manufacturing NESHAP. Further, emissions averaging would not be permitted between two or more different affected sources or between two or more sources in different subcategories. Finally, new sources could not use emissions averaging. In addition, we are proposing that any emissions averaging alternative would require each facility that intends to use emissions averaging to submit an emissions averaging plan, which will provide additional assurance that the necessary criteria will be followed. In such an emissions averaging plan, the facility would include the identification of: (1) all units in the averaging group, (2) the control technology installed, (3) the process parameter that will be monitored, (4) the specific control technology or pollution prevention measure to be used, (5) the test plan for the measurement of the HAP being averaged, and (6) the operating parameters to be monitored for each control device.

Under the proposed emissions averaging provision, the emissions for each unit in the averaging group would be capped at the emission level being achieved on the effective date of the final rule. The caps ensure that emissions do not increase above the emission levels that sources currently are designed, operated, and maintained to achieve. In the absence of performance tests, in documenting these caps, the affected sources would document the type, design, and operating specification of control devices installed on the effective date of the final rule to ensure that existing controls are not removed or operated less efficiently. The proposed emissions averaging provision would not apply to individual units if the unit shares a common stack with units in other subcategories, because, in that circumstance, it is not possible to distinguish the emissions from each individual unit.

For those cases where the emissions averaging provisions are used, the EPA is proposing to add a definition for “emissions averaging sources” in 40 CFR 63.8665 that includes those existing sources included in the emissions average. The EPA is also proposing to amend Table 1 to 40 CFR part 63, subpart KKKKK, to include the applicable emission limits determined under the emissions averaging provisions. In addition, the EPA is proposing to revise the reporting and recordkeeping provisions in 40 CFR 63.8630, 63.8635, and 63.8640 to include the following requirements where the emissions averaging provisions are used: (1) certifying in the notification of compliance status that the emissions level achieved or the control technology employed is no less stringent than the level or control technology contained in the notification; (2) reporting in the compliance report the emissions level that was being achieved or the control technology employed on the effective date of the rule; and (3) keeping a copy of the emissions averaging implementation plan, all required calculations, including monthly records of process rate, as applicable, and monitoring records.

The emissions averaging provisions that we are proposing are based in part on the emissions averaging provisions in the Hazardous Organic NESHAP (HON). The legal basis and rationale for the HON emissions averaging provisions were provided in the preamble to the final HON (59 FR 19425, April 22, 1994).

F. Technical Corrections

Technical corrections are being proposed to correct inaccuracies that were promulgated in the final rule, replace text that might be considered confusing, and correct outdated information. We are soliciting comment only on whether the proposed changes provide the intended accuracy, clarity, and consistency. These proposed changes are described in Table 2 of this preamble and shown in the proposed regulatory text below. We request comment on all of these proposed changes.

Table 2—Proposed Technical Corrections to 40 CFR Part 63, Subpart KKKKK

Table to subpart KKKKK	Description of proposed correction
40 CFR 63.8635(g)(1)	Update the addresses for EPA websites.
Table 2, item 3	To avoid confusion, revise the description of the operating limit for carbon flow rate.
Table 2, items 10 and 11	Revise the block period for average operating temperature for spray dryers and floor tile press dryers from 3-hour to 4-hour to align with the test run length for EPA Method 23.
Table 4, item 8	In the measurement of carbon flow rate date, include data from the Hg and D/F performance test data for tunnel or roller kilns equipped with an activated carbon injection system.
Table 4, items 11 and 12	Revise the block average for operating temperature for spray dryers and floor tile press dryers from 3-hour to 4-hour to align with the test run length for EPA Method 23.
Table 6, items 2.a.ii, 2.b.ii, 2.c.ii, 3.a.ii, 3.b.ii, 3.c.ii, 4.a.ii, 4.b.ii, 4.c.ii, 5.a.ii, 5.b.ii, 6.a.ii, 7.a.ii, 8.a.ii, 9.a.ii, 10.a.ii, 11.a.ii, 12.a.ii, 12.b.ii, 12.c.ii,	To avoid confusion, remove mention of the specific block period and simply refer to “the period of the initial performance test.”

13.a.ii, 13.b.ii, 13.c.ii, 14.a.ii, 14.b.ii, 14.c.ii, 15.a.ii, 15.b.ii, 16.a.ii, 17.a.ii, 18.a.ii, 19.a.ii, 20.a.ii, and 21.a.ii	
Table 7, items 10 and 11	Revise the block average for operating temperature for spray dryers and floor tile press dryers from 3-hour to 4-hour to align with the test run length for EPA Method 23.

V. Summary of Cost, Environmental, and Economic Impacts

This action will have no cost, environmental, energy, or economic impacts beyond those impacts presented in the October 26, 2015, final rule for Clay Ceramics Manufacturing and may result in a cost savings due to the changes in monitoring and testing requirements discussed in the previous section. The technical corrections are cost neutral.

VI. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at <https://www.epa.gov/laws-regulations/laws-and-executive-orders>.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is considered an Executive Order 13771 deregulatory action. The proposed rule is expected to provide meaningful burden reduction by deregulating aspects of the sanitaryware manufacturing process, but do not result in changes in costs to comply.

C. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. Burden is defined at 5 CFR 1320.3(b). OMB has previously approved the information collection

activities contained in the existing regulation (40 CFR part 63, subpart KKKKK) and has assigned OMB control number 2060-0513. This action does not change the information collection requirements.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden, or otherwise has a positive economic effect on the small entities subject to the rule. This proposed rule will not impose any additional requirements on small entities, only alternatives to existing requirements. We have, therefore, concluded that this action will have no net regulatory burden for all directly regulated small entities.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate as described in UMRA, 2 U.S.C. 1531-1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. It will neither impose substantial direct compliance costs on federally recognized tribal

governments, nor preempt tribal law. The proposed amendments impose no requirements on tribal governments. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of “covered regulatory action” in section 2-202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211, because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards.

K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does **not** have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). The documentation for this decision is contained in the docket (See “EJ Screening Report for Clay Ceramics,” Docket Item No. EPA-HQ-OAR-2013-0290-0241).

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practices and procedures, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: August 8, 2018.

Andrew R. Wheeler,
Acting Administrator.

For the reasons set out in the preamble, 40 CFR part 63 is proposed to be amended as follows:

**PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR
POLLUTANTS FOR SOURCE CATEGORIES**

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart KKKKK—[Amended]

2. Section 63.8595 is amended by:

- a. Revising paragraph (c);
- b. Redesignating paragraph (h) as paragraph (i);
- c. Adding a new paragraph (h); and
- d. Revising newly redesignated paragraphs (i) introductory text and (i)(1) introductory

text.

The revisions and addition read as follows:

§63.8595 How do I conduct performance tests and establish operating limits?

* * * * *

(c) Each performance test must be conducted according to the requirements in §63.7 and under the specific conditions in Table 4 to this subpart. Stacks to be tested at sanitaryware manufacturing facilities shall be limited to products of combustion (POC) stacks and not include cooling stacks.

* * * * *

(h)(1) As an alternative to meeting the requirements of §63.8555 for PM or mercury, if you have more than one existing source in any subcategories located at your facility, you may

demonstrate compliance by emissions averaging, if your averaged emissions are not more than 90 percent of the applicable emission limit, according to the procedures in this section. You may not include new sources in an emissions average.

(2) For a group of two or more existing sources in the same subcategory that each vent to a separate stack, you may average PM or mercury emissions among existing units to demonstrate compliance with the limits in Table 1 to this subpart as specified in paragraph (h)(2)(i) through (iv) of this section, if you satisfy the requirements in paragraphs (h)(3) and (4) of this section.

(i) You may average across existing sources in the same kiln type and size category (*e.g.*, roller or tunnel kilns, large or small kilns) and the same subcategory (*e.g.*, sanitaryware manual or spray machine or robot glaze application) where applicable;

(ii) You may not include a unit in the emissions average if the unit shares a common stack with units in other subcategories;

(iii) You may not include spray dryers or press dryers in the emissions average; and

(iv) You may not average between different types of pollutants.

(3) The averaged emissions rate from the existing sources participating in the emissions averaging option must not exceed 90 percent of the limits in Table 1 to this subpart at all times the affected units are subject to numeric emission limits following the compliance date specified in §63.8545.

(4)(i) You must demonstrate initial compliance using the maximum process rate and the results of the initial performance tests.

(ii) You must use Equation 9 to demonstrate that the PM or mercury emissions from all existing units participating in the emissions averaging option for that pollutant do not exceed the emission limits in Table 1 to this subpart.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^n (E_i \times P_{max\ i}) \div \sum_{i=1}^n P_{max\ i} \quad (\text{Eq. 9})$$

Where:

AveWeightedEmissions = Average weighted emissions for PM or mercury, in units of kilograms (pounds) per megagram (ton) of fired product for existing floor tile roller kilns and wall tile roller kilns, greenware fired for existing first-fired sanitaryware tunnel kilns, and first-fire glaze sprayed (dry weight basis) for existing tile glaze lines with glaze spraying and average weighted emissions for PM, in units of kilograms (pounds) per megagram (ton) of first-fire glaze sprayed (dry weight basis) for existing sanitaryware manual, spray machine, or robot glaze applications

E_i = Emission rate (as determined during the initial compliance demonstration) of PM or mercury from unit i , in units of kilograms (pounds) per megagram (ton). Determine the emission rate for PM or mercury by performance testing according to Table 4 to this subpart using the applicable equation in §63.8595(f)

$P_{max\ i}$ = Maximum process rate for unit i , in units of megagrams (tons)

n = Number of units participating in the emissions averaging option

1.1 = Required discount factor

(5)(i) After the initial compliance demonstration described in paragraph (h)(4) of this section, you must demonstrate compliance on a monthly basis determined at the end of every month (12 times per year) according to paragraph (h)(5)(ii) of this section. The first monthly period begins on the compliance date specified in §63.8545.

(ii) For each calendar month, you must use Equation 10 of this section to calculate the average weighted emission rate for that month.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^n (E_i \times P_{month\ i}) \div \sum_{i=1}^n P_{month\ i} \quad (\text{Eq. 10})$$

Where:

AveWeightedEmissions = Average weighted emissions for PM or mercury, in units of

kilograms (pounds) per megagram (ton) of fired product for existing floor tile roller kilns and wall tile roller kilns, greenware fired for existing first-fired sanitaryware tunnel kilns, and first-fire glaze sprayed (dry weight basis) for existing tile glaze lines with glaze spraying and average weighted emissions for PM, in units of kilograms (pounds) per megagram (ton) of first-fire glaze sprayed (dry weight basis) for existing sanitaryware manual, spray machine, or robot glaze applications, for that calendar month

- E_i = Emission rate (as determined during the most recent compliance demonstration) of PM or mercury from unit i , in units of kilograms (pounds) per megagram (ton). Determine the emission rate for PM or mercury by performance testing according to Table 4 to this subpart using the applicable equation in §63.8595(f)
- $P_{\text{month } i}$ = The process rate for that calendar month for unit i , in units of megagrams (tons)
- n = Number of units participating in the emissions averaging option
- 1.1 = Required discount factor

(6) Until 12 monthly weighted average emission rates have been accumulated, calculate and report only the average weighted emission rate determined under paragraph (h)(5)(ii) of this section for each calendar month. After 12 monthly weighted average emission rates have been accumulated, for each subsequent calendar month, use Equation 11 to calculate the 12-month rolling average of the monthly weighted average emission rates for the current calendar month and the previous 11 calendar months.

$$E_{avg} = \sum_{i=1}^n ER_i \div 12 \quad (\text{Eq. 11})$$

Where:

- E_{avg} = 12-month rolling average emission rate for PM or mercury, in units of kilograms (pounds) per megagram (ton) of fired product for existing floor tile roller kilns and wall tile roller kilns, greenware fired for existing first-fired sanitaryware tunnel kilns, and first-fire glaze sprayed (dry weight basis) for existing tile glaze lines with glaze spraying and average weighted emissions for PM, in units of kilograms (pounds) per megagram (ton) of first-fire glaze sprayed

(dry weight basis) for existing sanitaryware manual, spray machine, or robot glaze applications

ER_i = Monthly weighted average, for calendar month “i,” in units of kilograms (pounds) per megagram (ton), as calculated by paragraph (h)(5)(ii) of this section

(7) You must develop, and submit upon request to the applicable Administrator for review and approval, an implementation plan for emissions averaging according to the following procedures and requirements in paragraphs (h)(7)(i) through (iv) of this section.

(i) If requested, you must submit the implementation plan no later than 180 days before the date that the facility intends to demonstrate compliance using the emissions averaging option.

(ii) You must include the information contained in paragraphs (h)(7)(ii)(A) through (D) of this section in your implementation plan for all emission sources included in an emissions average:

(A) The identification of all existing sources in the averaging group, including for each either the applicable HAP emissions level or the control technology installed and the date on which you are requesting emissions averaging to commence;

(B) The specific control technology or pollution prevention measure to be used for each source in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple sources, the owner or operator must identify each source;

(C) The test plan for the measurement of emissions in accordance with the requirements in §63.8595;

(D) The operating parameters to be monitored for each control system or device consistent with §63.8555 and Table 2 to this subpart, and a description of how the operating limits will be determined;

(iii) If submitted upon request, the Administrator shall review and approve or disapprove the plan according to the following criteria:

(A) Whether the content of the plan includes all of the information specified in paragraph (h)(7)(ii) of this section; and

(B) Whether the plan presents sufficient information to determine that compliance will be achieved and maintained.

(iv) The applicable Administrator shall not approve an emissions averaging implementation plan containing any of the following provisions:

(A) Any averaging between emissions of differing pollutants or between differing sources; or

(B) The inclusion of any emission source other than an existing unit in the same subcategories.

(i) For each affected source that is subject to the emission limits specified in Table 1 to this subpart and is equipped with an APCD that is not addressed in Table 2 to this subpart or that is using process changes as a means of meeting the emission limits in Table 1 to this subpart, you must meet the requirements in §63.8(f) and paragraphs (i)(1) and (2) of this section.

(1) Submit a request for approval of alternative monitoring procedures to the Administrator no later than the notification of intent to conduct a performance test. The request must contain the information specified in paragraphs (i)(1)(i) through (iv) of this section.

* * * * *

3. Section 63.8620 is amended by:

a. Redesignating paragraphs (e)(1) through (3) as paragraphs (e)(1)(i) through (iii);

b. Redesignating paragraph (e) introductory text as paragraph (e)(1) and revising it; and

c. Adding new paragraph (e)(2) and paragraphs (f) and (g).

The revision and additions read as follows:

§63.8620 How do I demonstrate continuous compliance with the emission limitations and work practice standards?

* * * * *

(e)(1) *VE testing*. You must demonstrate continuous compliance with the operating limits in Table 2 to this subpart for visible emissions (VE) from tunnel or roller kilns that are uncontrolled or equipped with DIFF, DLS/FF, or other dry control device by monitoring VE at each kiln stack according to the requirements in paragraphs (e)(1)(i) through (iii) of this section.

* * * * *

(2) *Alternative to VE testing*. You must demonstrate continuous compliance with the operating limits in Table 2 to this subpart for kiln temperature profile for tunnel or roller kilns that are uncontrolled or equipped with DIFF, DLS/FF, or other dry control device by maintaining the kiln temperature profile within acceptable parameters and, for any incidence where the kiln is out of control (*i.e.*, exceeds its temperature profile), monitoring VE at each kiln stack according to the requirements in paragraphs (e)(2)(i) through (iii) of this section.

(i) Perform VE observations at the stack of each out-of-control kiln according to the procedures of Method 22 of 40 CFR part 60, appendix A-7. The duration of each Method 22 test must be at least 15 minutes.

(ii) If VE are observed during any test conducted using Method 22 of 40 CFR part 60, appendix A-7, you must promptly initiate and complete corrective actions according to your OM&M plan.

(iii) If VE are observed during any test conducted using Method 22 of 40 CFR part 60, appendix A-7, you must report these deviations by following the requirements in §63.8635.

(f) Following the compliance date, you must demonstrate compliance with the emissions averaging provision under this subpart on a continuous basis by meeting the requirements of paragraphs (f)(1) and (2) of this section.

(1) For each calendar month, demonstrate compliance with the average weighted emissions limit for the existing units participating in the emissions averaging option as determined in §63.8595(h)(5) and (6).

(2) For each existing unit participating in the emissions averaging option, you must comply with the continuous compliance requirements in Table 7 to this subpart.

(g) Any instance where you fail to comply with the continuous monitoring requirements in paragraphs (f)(1) and (2) of this section is a deviation.

4. Section 63.8630 is amended by revising paragraph (c) introductory text and adding paragraph (c)(4) to read as follows:

§63.8630 What notifications must I submit and when?

* * * * *

(c) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 6 to this subpart, your Notification of Compliance Status as specified in Table 9 to this subpart must include the information in paragraphs (c)(1) through (4) of this section.

* * * * *

(4) Identification of whether you plan to demonstrate compliance by emissions averaging.

If you plan to demonstrate compliance by emissions averaging, report the emissions level that was being achieved or the control technology employed on December 28, 2015.

* * * * *

5. Section 63.8635 is amended by:

- a. Revising paragraph (c) introductory text;
- b. Revising paragraph (c)(4)(iii)(C);
- c. Adding paragraph (c)(9); and
- d. Revising paragraph (g)(1).

The revisions and addition read as follows:

§63.8635 What reports must I submit and when?

* * * * *

(c) The compliance report must contain the information in paragraphs (c)(1) through (9) of this section.

* * * * *

(4) * * *

(iii) * * *

(C) Based on the information recorded under paragraphs (c)(4)(iii)(A) and (B) of this section, compute the annual percent of affected source operating uptime during which the control device was offline for routine maintenance using Equation 12.

$$RM = \frac{DT_p + DT_c}{SU_p + SU_c} (100) \quad (\text{Eq. 12})$$

Where:

RM = Annual percentage of affected source uptime during which control device was offline for routine control device maintenance

DT_p = Control device downtime claimed under the routine control device maintenance alternative standard for the previous semiannual compliance period

DT_c = Control device downtime claimed under the routine control device maintenance alternative standard for the current semiannual compliance period

SU_p = Affected source uptime for the previous semiannual compliance period

SU_c = Affected source uptime for the current semiannual compliance period

* * * * *

(9) If you plan to demonstrate compliance by emissions averaging, certify the emissions level achieved or the control technology employed is no less stringent than the level or control technology contained in the notification of compliance status in §63.8630(c)(4).

* * * * *

(g) * * *

(1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). The CEDRI database can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site,

including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

* * * * *

6. Section 63.8640 is amended by revising paragraph (c) introductory text and adding paragraph (c)(11) to read as follows:

§63.8640 What records must I keep?

* * * * *

(c) You must also maintain the records listed in paragraphs (c)(1) through (11) of this section.

* * * * *

(11) If you elect to average emissions consistent with §63.8595(h), you must additionally keep a copy of the emissions averaging implementation plan required in §63.8595(h)(7), all calculations required under §63.8595(h), including monthly records of process rate, as applicable, and monitoring records consistent with §63.8620(f).

7. Section 63.8665 is amended by adding definitions for “cooling stack,” “emissions averaging sources,” and “products of combustion (POC) stack,” in alphabetical order to read as follows:

§63.8665 What definitions apply to this subpart?

* * * * *

Cooling stack means a stack (release point) installed on the cooling zone of a tunnel kiln to release air used to cool down the fired product from its maximum temperature to room temperature. A cooling stack does not release any air from the firing zone of the tunnel kiln.

* * * * *

Emissions averaging sources means, for purposes of the emissions averaging provisions of §63.8595(h), the collection of all existing ceramic tile roller kilns, sanitaryware tunnel kilns, ceramic tile glaze lines using glaze spraying, and sanitaryware glaze spray booths, within a kiln type and size category and within a subcategory.

* * * * *

Products of combustion (POC) stack means a stack (release point) installed on the front end of the firing zone of a tunnel kiln to release air used to heat the greenware from room temperature to its maximum temperature.

* * * * *

8. Table 1 to subpart KKKKK is amended by adding the entries 22 and 23 to read as follows:

Table 1 to Subpart KKKKK of Part 63--Emission Limits

As stated in §63.8555, you must meet each emission limit in the following table that applies to you:

For each...	You must meet the following emission limits...
* * * * *	
22. Collection of emissions averaging sources	PM emissions must not exceed the applicable emission limit, under the emissions averaging option, as determined using Equations 9 through 11.
23. Collection of emissions averaging sources	Hg emissions must not exceed the applicable emission limit, under the emissions averaging option, as determined using Equations 9 through 11.

9. Table 2 to subpart KKKKK is revised to read as follows:

Table 2 to Subpart KKKKK of Part 63--Operating Limits

As stated in §63.8555, you must meet each operating limit in the following table that applies to you:

For each...	You must...	Or you must...
1. Tunnel or roller kiln equipped with a DIFF or DLS/FF.	a. If you use a bag leak detection system, initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with your OM&M plan; operate and maintain the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; and	i. Maintain no VE from the DIFF or DLS/FF stack; or
	b. Maintain free-flowing lime in the feed hopper or silo and to the APCD at all times for continuous injection systems; maintain the feeder setting (on a per ton of throughput basis) at or above the level established during the performance test for continuous injection systems in which compliance was demonstrated.	ii. Maintain your kiln temperature profile.
2. Tunnel or roller kiln equipped with a WS.	a. Maintain the average scrubber liquid pH for each 3-hour block period at or above the average scrubber liquid pH established during the HF/HCl performance test in which compliance was demonstrated; and	
	b. Maintain the average scrubber liquid flow rate for each 3-hour block period at or above the highest average scrubber liquid flow rate established during the HF/HCl and PM performance tests in which compliance was demonstrated.	
3. Tunnel or roller kiln equipped with an ACI system.	Maintain the 3-hour block average carbon flow rate at or above the highest average carbon flow rate established during the Hg and dioxin/furan performance tests in which compliance was demonstrated.	
4. Tunnel or roller kiln intending to comply with dioxin/furan emission limit without an ACI system.	Maintain the average operating temperature for each 12-hour block period at or below the highest operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.	
5. Tunnel or roller kiln with no add-on control.	a. Maintain no VE from the stack; and	i. Maintain your kiln temperature profile.
	b. Maintain the kiln process rate at or below the kiln process rate determined according to §63.8595(g)(1) if your total facility maximum potential HCl-equivalent emissions are greater than the HCl-equivalent limit in Table 1 to this subpart; and	

	c. Maintain the average operating temperature for each 12-hour block period at or below the highest operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.	
6. Glaze spray operation equipped with a FF.	a. If you use a bag leak detection system, initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with your OM&M plan; operate and maintain the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period.	i. Maintain no VE from the FF stack.
7. Glaze spray operation equipped with a WS.	a. Maintain the average scrubber pressure drop for each 3-hour block period at or above the average pressure drop established during the PM performance test in which compliance was demonstrated; and	
	b. Maintain the average scrubber liquid flow rate for each 3-hour block period at or above the average scrubber liquid flow rate established during the PM performance test in which compliance was demonstrated.	
8. Glaze spray operation equipped with a water curtain.	a. Conduct daily inspections to verify the presence of water flow to the wet control system; and	
	b. Conduct annual inspections of the interior of the control equipment (if applicable) to determine the structural integrity and condition of the control equipment.	
9. Glaze spray operation equipped with baffles.	Conduct an annual visual inspection of the baffles to confirm the baffles are in place.	
10. Spray dryer.	Maintain the average operating temperature for each 4-hour block period at or above the average temperature established during the dioxin/furan performance test in which compliance was demonstrated.	
11. Floor tile press dryer.	Maintain the average operating temperature for each 4-hour block period at or below the average temperature established during the dioxin/furan performance test in which compliance was demonstrated.	

10. Table 4 to subpart KKKKK is revised to read as follows:

Table 4 to Subpart KKKKK of Part 63--Requirements for Performance Tests

As stated in §63.8595, you must conduct each performance test in the following table that applies to you:

For each...	You must...	Using...	According to the following requirements...
1. Tunnel or roller kiln.	a. Select locations of sampling ports and the number of traverse points.	Method 1 or 1A of 40 CFR part 60, appendix A-1.	Sampling sites must be located at the outlet of the APCD and prior to any releases to the atmosphere for all affected sources.
	b. Determine velocities and volumetric flow rate.	Method 2 of 40 CFR part 60, appendix A-1.	You may use Method 2A, 2C, 2D, or 2F of 40 CFR part 60, appendix A-1, or Method 2G of 40 CFR part 60, appendix A-2, as appropriate, as an alternative to using Method 2 of 40 CFR part 60, appendix A-1.
	c. Conduct gas molecular weight analysis.	Method 3 of 40 CFR part 60, appendix A-2.	You may use Method 3A or 3B of 40 CFR part 60, appendix A-2, as appropriate, as an alternative to using Method 3 of 40 CFR part 60, appendix A-2. ANSI/ASME PTC 19.10-1981 (incorporated by reference, see §63.14) may be used as an alternative to the manual procedures (but not the instrumental procedures) in Methods 3A and 3B.
	d. Measure moisture content of the stack gas.	Method 4 of 40 CFR part 60, appendix A-3.	
	e. Measure HF and HCl emissions.	i. Method 26A of 40 CFR part 60, appendix A-8; or	You may use Method 26 of 40 CFR part 60, appendix A-8, as an alternative to using Method 26A of 40 CFR part 60, appendix A-8, when no acid PM (<i>e.g.</i> , HF or HCl dissolved in water droplets emitted by sources controlled by a WS) is present. ASTM D6735-01 (Reapproved 2009) (incorporated by reference, see §63.14) may be used as an alternative to Methods 26 and 26A.

	ii. Method 320 of appendix A of this part.	When using Method 320 of appendix A of this part, you must follow the analyte spiking procedures of section 13 of Method 320 of appendix A of this part, unless you can demonstrate that the complete spiking procedure has been conducted at a similar source. ASTM D6348-03 (Reapproved 2010) (incorporated by reference, see §63.14) may be used as an alternative to Method 320 if the test plan preparation and implementation in Annexes A1-A8 are mandatory and the %R in Annex A5 is determined for each target analyte.
2. Glaze spray operation	f. Measure PM emissions.	i. Method 5 of 40 CFR part 60, appendix A-3; or ii. Method 29 of 40 CFR part 60, appendix A-8.
	g. Measure Hg emissions.	Method 29 of 40 CFR part 60, appendix A-8. ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14) may be used as an alternative to Method 29 (portion for Hg only).
	h. Measure dioxin/furan emissions.	Method 23 of 40 CFR part 60, appendix A-7.
	a. Select locations of sampling ports and the number of traverse points.	Method 1 or 1A of 40 CFR part 60, appendix A-1. Sampling sites must be located at the outlet of the APCD and prior to any releases to the atmosphere for all affected sources.
	b. Determine velocities and volumetric flow rate.	Method 2 of 40 CFR part 60, appendix A-1. You may use Method 2A, 2C, 2D, or 2F of 40 CFR part 60, appendix A-1, or Method 2G of 40 CFR part 60, appendix A-2, as appropriate, as an alternative to using Method 2 of 40 CFR part 60, appendix A-1.
	c. Conduct gas molecular weight analysis.	Method 3 of 40 CFR part 60, appendix A-2. You may use Method 3A or 3B of 40 CFR part 60, appendix A-2, as appropriate, as an alternative to using Method 3 of 40 CFR part 60, appendix A-2. ANSI/ASME PTC 19.10-1981 (incorporated by reference, see §63.14) may be used as an alternative to the manual procedures (but not the instrumental procedures) in Methods 3A and 3B.
	d. Measure moisture content of the stack gas.	Method 4 of 40 CFR part 60, appendix A-3.

3. Spray dryer or floor tile press dryer	e. Measure PM emissions.	Method 5 of 40 CFR part 60, appendix A-3.	
	f. Measure Hg emissions (tile glaze spray operations only).	Method 29 of 40 CFR part 60, appendix A-8.	ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14) may be used as an alternative to Method 29 (portion for Hg only).
	a. Select locations of sampling ports and the number of traverse points.	Method 1 or 1A of 40 CFR part 60, appendix A-1.	Sampling sites must be located at the outlet of the APCD and prior to any releases to the atmosphere for all affected sources.
	b. Determine velocities and volumetric flow rate.	Method 2 of 40 CFR part 60, appendix A-1.	You may use Method 2A, 2C, 2D, or 2F of 40 CFR part 60, appendix A-1, or Method 2G of 40 CFR part 60, appendix A-2, as appropriate, as an alternative to using Method 2 of 40 CFR part 60, appendix A-1.
	c. Conduct gas molecular weight analysis.	Method 3 of 40 CFR part 60, appendix A-2.	You may use Method 3A or 3B of 40 CFR part 60, appendix A-2, as appropriate, as an alternative to using Method 3 of 40 CFR part 60, appendix A-2. ANSI/ASME PTC 19.10-1981 (incorporated by reference, see §63.14) may be used as an alternative to the manual procedures (but not the instrumental procedures) in Methods 3A and 3B.
4. Tunnel or roller kiln with no add-on control.	d. Measure moisture content of the stack gas.	Method 4 of 40 CFR part 60, appendix A-3.	
	e. Measure dioxin/furan emissions.	Method 23 of 40 CFR part 60, appendix A-7.	
	a. Establish the operating limit(s) for kiln process rate if the total facility maximum potential HCl-equivalent emissions are greater than the HCl-equivalent limit in Table 1 to this subpart.	HCl-equivalent limit in Table 1 to this subpart and emissions and production data from the HF/HCl/Cl ₂ performance test.	Using the procedures in §63.8595(g)(1), you must determine the maximum process rate(s) for your kiln(s) that would ensure total facility maximum potential HCl-equivalent emissions remain at or below the HCl-equivalent limit in Table 1 to this subpart. The maximum process rate(s) would become your site-specific process rate operating limit(s).

	<p>b. Establish the operating limit for kiln operating temperature.</p>	<p>i. Data from the kiln operating temperature measurement device during the dioxin/furan performance test.</p>	<p>(1) You must continuously measure the kiln operating temperature during three 4-hour test runs and, from a 12-hour block of time consisting of 1-hour increments, calculate the following two values:</p> <p>(a) The standard deviation of the 12 1-hour temperature measurements, calculated as follows:</p> $\sigma = \sqrt{\frac{1}{N} \times \sum_{i=1}^N (x_i - \mu)^2} \quad (\text{Eq. 13})$ <p>Where:</p> <p>σ = standard deviation</p> <p>x_i = each 1-hour temperature measurement</p> <p>μ = mean of all 12 1-hour measurements</p> <p>N = 12 measurements</p> <p>(b) 1 percent of the 12-hour block average.</p> <p>(2) You must decide which of the two values would provide the greatest variability (<i>i.e.</i>, the highest value), and then add this value to the 12-hour block average measured during the compliance testing. This would become the maximum temperature your kiln would be allowed to operate during normal operations.</p>
<p>5. Tunnel or roller kiln that is complying with PM and/or Hg production-based emission limits.</p>	<p>Determine the production rate during each PM/Hg test run in order to determine compliance with PM and/or Hg production-based emission limits.</p>	<p>Production data collected during the PM/Hg performance tests (<i>e.g.</i>, the number of ceramic pieces and weight per piece in the kiln during a test run divided by the amount of time to fire a piece).</p>	<p>You must measure and record the production rate, on a ton of throughput processed basis, of the affected kiln for each of the three test runs.</p>

6. Tunnel or roller kiln equipped with a DIFF or DLS/FF.	Establish the operating limit for the lime feeder setting.	Data from the lime feeder during the HF/HCl performance test.	For continuous lime injection systems, you must ensure that lime in the feed hopper or silo and to the APCD is free-flowing at all times during the performance test and record the feeder setting, on a per ton of throughput basis, for the three test runs. If the feed rate setting varies during the three test runs, determine and record the average feed rate from the three test runs. The average of the three test runs establishes your minimum site-specific feed rate operating limit.
7. Tunnel or roller kiln equipped with a WS.	a. Establish the operating limit for the average scrubber liquid pH.	Data from the pH measurement device during the HF/HCl performance test.	You must continuously measure the scrubber liquid pH, determine and record the block average pH values for the three test runs, and determine and record the 3-hour block average of the recorded pH measurements for the three test runs. The average of the three test runs establishes your minimum site-specific liquid pH operating limit.
	b. Establish the operating limit for the average scrubber liquid flow rate.	Data from the flow rate measurement device during the HF/HCl and PM performance tests.	You must continuously measure the scrubber liquid flow rate, determine and record the block average flow rate values for the three test runs, and determine and record the 3-hour block average of the recorded flow rate measurements for the three test runs. The average of the three test runs establishes your minimum site-specific liquid flow rate operating level. If different average wet scrubber liquid flow rate values are measured during the HF/HCl and PM tests, the highest of the average values become your site-specific operating limit.
8. Tunnel or roller kiln equipped with an ACI system	Establish the operating limit for the average carbon flow rate.	Data from the carbon flow rate measurement conducted during the Hg and dioxin/furan performance tests.	You must measure the carbon flow rate during each test run, determine and record the block average carbon flow rate values for the three test runs, and determine and record the 3-hour block average of the recorded carbon flow rate measurements for the three test runs. The average of the three test runs establishes your minimum site-specific activated carbon flow rate operating limit.

<p>9. Tunnel or roller kiln intending to comply with dioxin/furan emission limit without an ACI system.</p>	<p>a. Establish the operating limit for kiln operating temperature.</p>	<p>i. Data from the kiln operating temperature measurement device during the dioxin/furan performance test.</p>	<p>(1) You must continuously measure the kiln operating temperature during three 4-hour test runs and, from a 12-hour block of time consisting of 1-hour increments, calculate the following two values:</p> <p>(a) The standard deviation of the 12 1-hour temperature measurements, calculated as follows:</p> $\sigma = \sqrt{\frac{1}{N} \times \sum_{i=1}^N (x_i - \mu)^2} \quad (\text{Eq. 14})$ <p>Where:</p> <p>σ = standard deviation</p> <p>x_i = each 1-hour temperature measurement</p> <p>μ = mean of all 12 1-hour measurements</p> <p>N = 12 measurements</p> <p>(b) 1 percent of the 12-hour block average.</p> <p>(2) You must decide which of the two values would provide the greatest variability (<i>i.e.</i>, the highest value), and then add this value to the 12-hour block average measured during the compliance testing. This would become the maximum temperature your kiln would be allowed to operate during normal operations.</p>
<p>10. Glaze spray operation equipped with a WS.</p>	<p>a. Establish the operating limit for the average scrubber pressure drop.</p>	<p>Data from the pressure drop measurement device during the PM performance test.</p>	<p>You must continuously measure the scrubber pressure drop, determine and record the block average pressure drop values for the three test runs, and determine and record the 3-hour block average of the recorded pressure drop measurements for the three test runs. The average of the three test runs establishes your minimum site-specific pressure drop operating limit.</p>

	b. Establish the operating limit for the average scrubber liquid flow rate.	Data from the flow rate measurement device during the PM performance test.	You must continuously measure the scrubber liquid flow rate, determine and record the block average flow rate values for the three test runs, and determine and record the 3-hour block average of the recorded flow rate measurements for the three test runs. The average of the three test runs establishes your minimum site-specific liquid flow rate operating limit.
11. Spray dryer.	Establish the operating limit for operating temperature.	Data from the temperature measurement device during the dioxin/furan performance test.	You must continuously measure the operating temperature, determine and record the block average temperature values for the three test runs, and determine and record the 4-hour block average of the recorded temperature measurements for the three test runs. The average of the three test runs establishes your minimum site-specific operating limit.
12. Floor tile press dryer.	Establish the operating limit for operating temperature.	Data from the temperature measurement device during the dioxin/furan performance test.	You must continuously measure the operating temperature, determine and record the block average temperature values for the three test runs, and determine and record the 4-hour block average of the recorded temperature measurements for the three test runs. The average of the three test runs establishes your maximum site-specific operating limit.

11. Table 6 to subpart KKKKK is revised to read as follows:

Table 6 to Subpart KKKKK of Part 63--Initial Compliance with Emission

Limitations and Work Practice Standards

As stated in §63.8605, you must demonstrate initial compliance with each emission limitation and work practice standard that applies to you according to the following table:

For each...	For the following...	You have demonstrated initial compliance if...
1. Collection of all tunnel or roller kilns at the facility.	a. HF, HCl, and Cl ₂ emissions must not exceed 62 kg/hr (140 lb/hr) HCl equivalent.	i. You measure HF and HCl emissions for each kiln using Method 26 or 26A of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6735-01 (Reapproved 2009) (incorporated by reference, see §63.14); or Method 320 of appendix A of this part or its alternative, ASTM D6348-03 (Reapproved 2010) (incorporated by reference, see §63.14); and
		ii. You calculate the HCl-equivalent emissions for HF for each kiln using Equation 4 to this subpart; and
		iii. You sum the HCl-equivalent values for all kilns at the facility using Equation 5 to this subpart; and
		iv. The facility total HCl-equivalent does not exceed 62 kg/hr (140 lb/hr).
2. Existing floor tile roller kiln.	a. PM emissions must not exceed 0.063 kg/Mg (0.13 lb/ton) of fired product.	i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3 or Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, according to the calculations in §63.8595(f)(1), do not exceed 0.063 kg/Mg (0.13 lb/ton) of fired product; and
		ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 0.063 kg/Mg (0.13 lb/ton) of fired product.
	b. Hg emissions must not exceed 6.3 E-05 kg/Mg (1.3 E-04 lb/ton) of fired product.	i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 6.3 E-05 kg/Mg (1.3 E-04 lb/ton) of fired product; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which Hg emissions did not exceed 6.3 E-05 kg/Mg (1.3 E-04 lb/ton) of fired product.
	c. Dioxin/furan emissions must not exceed 2.8 ng/kg of fired product.	i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 2.8 ng/kg of fired product; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 2.8 ng/kg of fired product.
3. Existing wall tile roller kiln	a. PM emissions must not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product.	i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3 or Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, according to the calculations in §63.8595(f)(1), do not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product.

	b. Hg emissions must not exceed 1.1 E-04 kg/Mg (2.1 E-04 lb/ton) of fired product.	i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 1.1 E-04 kg/Mg (2.1 E-04 lb/ton) of fired product; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which Hg emissions did not exceed 1.1 E-04 kg/Mg (2.1 E-04 lb/ton) of fired product.
	c. Dioxin/furan emissions must not exceed 0.22 ng/kg of fired product.	i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 0.22 ng/kg of fired product; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 0.22 ng/kg of fired product.
4. Existing first-fire sanitaryware tunnel kiln	a. PM emissions must not exceed 0.17 kg/Mg (0.34 lb/ton) of greenware fired.	i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3 or Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, according to the calculations in §63.8595(f)(1), do not exceed 0.17 kg/Mg (0.34 lb/ton) of greenware fired; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 0.17 kg/Mg (0.34 lb/ton) of greenware fired.
	b. Hg emissions must not exceed 1.3 E-04 kg/Mg (2.6 E-04 lb/ton) of greenware fired.	i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 1.3 E-04 kg/Mg (2.6 E-04 lb/ton) of greenware fired; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which Hg emissions did not exceed 1.3 E-04 kg/Mg (2.6 E-04 lb/ton) of greenware fired.
	c. Dioxin/furan emissions must not exceed 3.3 ng/kg of greenware fired.	i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 3.3 ng/kg of greenware fired; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 3.3 ng/kg of greenware fired.
5. Existing tile glaze line with glaze spraying	a. PM emissions must not exceed 0.93 kg/Mg (1.9 lb/ton) of first-fire glaze sprayed (dry weight basis).	i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3, over the period of the initial performance test, according to the calculations in §63.8595(f)(2), do not exceed 0.93 kg/Mg (1.9 lb/ton) of first-fire glaze sprayed (dry weight basis); and

		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 0.93 kg/Mg (1.9 lb/ton) of first-fire glaze sprayed (dry weight basis).
	b. Hg emissions must not exceed 8.0 E-05 kg/Mg (1.6 E-04 lb/ton) of first-fire glaze sprayed (dry weight basis).	<p>i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 8.0 E-05 kg/Mg (1.6 E-04 lb/ton) of first-fire glaze sprayed (dry weight basis); and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which Hg emissions did not exceed 8.0 E-05 kg/Mg (1.6 E-04 lb/ton) of first-fire glaze sprayed (dry weight basis).</p>
6. Existing sanitaryware manual glaze application	a. PM emissions must not exceed 18 kg/Mg (35 lb/ton) of first-fire glaze sprayed (dry weight basis).	<p>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3, over the period of the initial performance test, according to the calculations in §63.8595(f)(2), do not exceed 18 kg/Mg (35 lb/ton) of first-fire glaze sprayed (dry weight basis); and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 18 kg/Mg (35 lb/ton) of first-fire glaze sprayed (dry weight basis).</p>
7. Existing sanitaryware spray machine glaze application	a. PM emissions must not exceed 6.2 kg/Mg (13 lb/ton) of first-fire glaze sprayed (dry weight basis).	<p>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3, over the period of the initial performance test, according to the calculations in §63.8595(f)(2), do not exceed 6.2 kg/Mg (13 lb/ton) of first-fire glaze sprayed (dry weight basis); and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 6.2 kg/Mg (13 lb/ton) of first-fire glaze sprayed (dry weight basis).</p>
8. Existing sanitaryware robot glaze application	a. PM emissions must not exceed 4.5 kg/Mg (8.9 lb/ton) of first-fire glaze sprayed (dry weight basis).	<p>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3, over the period of the initial performance test, according to the calculations in §63.8595(f)(2), do not exceed 4.5 kg/Mg (8.9 lb/ton) of first-fire glaze sprayed (dry weight basis); and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 4.5 kg/Mg (8.9 lb/ton) of first-fire glaze sprayed (dry weight basis).</p>
9. Existing floor tile spray dryer	a. Dioxin/furan emissions must not exceed 19 ng/kg of throughput processed.	i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 19 ng/kg of throughput processed; and

		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 19 ng/kg of throughput processed.
10. Existing wall tile spray dryer	a. Dioxin/furan emissions must not exceed 0.058 ng/kg of throughput processed.	<p>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 0.058 ng/kg of throughput processed; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 0.058 ng/kg of throughput processed.</p>
11. Existing floor tile press dryer	a. Dioxin/furan emissions must not exceed 0.024 ng/kg of throughput processed.	<p>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 0.024 ng/kg of throughput processed; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 0.024 ng/kg of throughput processed.</p>
12. New or reconstructed floor tile roller kiln.	a. PM emissions must not exceed 0.019 kg/Mg (0.037 lb/ton) of fired product.	i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3 or Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, according to the calculations in §63.8595(f)(1), do not exceed 0.019 kg/Mg (0.037 lb/ton) of fired product; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 0.019 kg/Mg (0.037 lb/ton) of fired product.
	b. Hg emissions must not exceed 2.0 E-05 kg/Mg (3.9 E-05 lb/ton) of fired product.	i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 2.0 E-05 kg/Mg (3.9 E-05 lb/ton) of fired product; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which Hg emissions did not exceed 2.0 E-05 kg/Mg (3.9 E-05 lb/ton) of fired product.
	c. Dioxin/furan emissions must not exceed 1.3 ng/kg of fired product.	i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 1.3 ng/kg of fired product; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 1.3 ng/kg of fired product.
13. New or reconstructed wall tile roller kiln.	a. PM emissions must not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product.	i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3 or Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, according to the calculations in §63.8595(f)(1), do not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product; and

		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product.
	b. Hg emissions must not exceed 1.1 E-04 kg/Mg (2.1 E-04 lb/ton) of fired product.	<p>i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 1.1 E-04 kg/Mg (2.1 E-04 lb/ton) of fired product; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which Hg emissions did not exceed 1.1 E-04 kg/Mg (2.1 E-04 lb/ton) of fired product.</p>
	c. Dioxin/furan emissions must not exceed 0.22 ng/kg of fired product.	<p>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 0.22 ng/kg of fired product; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 0.22 ng/kg of fired product.</p>
14. New or reconstructed first-fire sanitaryware tunnel kiln	a. PM emissions must not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired.	i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3 or Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, according to the calculations in §63.8595(f)(1), do not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired.
	b. Hg emissions must not exceed 6.1 E-05 kg/Mg (1.3 E-04 lb/ton) of greenware fired.	i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 6.1 E-05 kg/Mg (1.3 E-04 lb/ton) of greenware fired; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which Hg emissions did not exceed 6.1 E-05 kg/Mg (1.3 E-04 lb/ton) of greenware fired.
	c. Dioxin/furan emissions must not exceed 0.99 ng/kg of greenware fired.	i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 0.99 ng/kg of greenware fired; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 0.99 ng/kg of greenware fired.

15. New or reconstructed tile glaze line with glaze spraying	a. PM emissions must not exceed 0.31 kg/Mg (0.61 lb/ton) of first-fire glaze sprayed (dry weight basis).	i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3, over the period of the initial performance test, according to the calculations in §63.8595(f)(2), do not exceed 0.31 kg/Mg (0.61 lb/ton) of first-fire glaze sprayed (dry weight basis); and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 0.31 kg/Mg (0.61 lb/ton) of first-fire glaze sprayed (dry weight basis).
	b. Hg emissions must not exceed 8.0 E-05 kg/Mg (1.6 E-04 lb/ton) of first-fire glaze sprayed (dry weight basis).	i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 8.0 E-05 kg/Mg (1.6 E-04 lb/ton) of first-fire glaze sprayed (dry weight basis); and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which Hg emissions did not exceed 8.0 E-05 kg/Mg (1.6 E-04 lb/ton) of first-fire glaze sprayed (dry weight basis).
16. New or reconstructed sanitaryware manual glaze application	a. PM emissions must not exceed 2.0 kg/Mg (3.9 lb/ton) of first-fire glaze sprayed (dry weight basis).	i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3, over the period of the initial performance test, according to the calculations in §63.8595(f)(2), do not exceed 2.0 kg/Mg (3.9 lb/ton) of first-fire glaze sprayed (dry weight basis); and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 2.0 kg/Mg (3.9 lb/ton) of first-fire glaze sprayed (dry weight basis).
17. New or reconstructed sanitaryware spray machine glaze application	a. PM emissions must not exceed 1.6 kg/Mg (3.2 lb/ton) of first-fire glaze sprayed (dry weight basis).	i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3, over the period of the initial performance test, according to the calculations in §63.8595(f)(2), do not exceed 1.6 kg/Mg (3.2 lb/ton) of first-fire glaze sprayed (dry weight basis); and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 1.6 kg/Mg (3.2 lb/ton) of first-fire glaze sprayed (dry weight basis).
18. New or reconstructed sanitaryware robot glaze application	a. PM emissions must not exceed 1.2 kg/Mg (2.3 lb/ton) of first-fire glaze sprayed (dry weight basis).	i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3, over the period of the initial performance test, according to the calculations in §63.8595(f)(2), do not exceed 1.2 kg/Mg (2.3 lb/ton) of first-fire glaze sprayed (dry weight basis); and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 1.2 kg/Mg (2.3 lb/ton) of first-fire glaze sprayed (dry weight basis).

19. New or reconstructed floor tile spray dryer	a. Dioxin/furan emissions must not exceed 0.071 ng/kg of throughput processed.	i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 0.071 ng/kg of throughput processed; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 0.071 ng/kg of throughput processed.
20. New or reconstructed wall tile spray dryer	a. Dioxin/furan emissions must not exceed 0.058 ng/kg of throughput processed.	i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 0.058 ng/kg of throughput processed; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 0.058 ng/kg of throughput processed.
21. New or reconstructed floor tile press dryer	a. Dioxin/furan emissions must not exceed 0.024 ng/kg of throughput processed.	i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 0.024 ng/kg of throughput processed; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 0.024 ng/kg of throughput processed.
22. Existing, new, or reconstructed sanitaryware shuttle kiln.	a. Minimize HAP emissions.	i. Use natural gas, or equivalent, as the kiln fuel; and
		ii. Develop a designed firing time and temperature cycle for the sanitaryware shuttle kiln. You must either program the time and temperature cycle into your kiln or track each step on a log sheet; and
		iii. Label each sanitaryware shuttle kiln with the maximum load (in tons) of greenware that can be fired in the kiln during a single firing cycle; and
		iv. Develop maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices, controls that regulate air-to-fuel ratios, and controls that regulate firing cycles.

12. Table 7 to subpart KKKKK is revised to read as follows:

Table 7 to Subpart KKKKK of Part 63--Continuous Compliance with Emission

Limitations and Work Practice Standards

As stated in §63.8620, you must demonstrate continuous compliance with each emission limitation and work practice standard that applies to you according to the following table:

For each...	For the following...	You must demonstrate continuous compliance by...	Or by...
1. Tunnel or roller kiln equipped with a DIFF or DLS/FF.	a. Each emission limit in Table 1 to this subpart and each operating limit in Item 1 of Table 2 to this subpart for kilns equipped with DIFF or DLS/FF.	i. If you use a bag leak detection system, as prescribed in 63.8450(e), initiating corrective action within 1 hour of a bag leak detection system alarm and completing corrective actions in accordance with your OM&M plan; operating and maintaining the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; in calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted; if corrective action is required, each alarm is counted as a minimum of 1 hour; if you take longer than 1 hour to initiate corrective action, the alarm time is counted as the actual amount of time taken by you to initiate corrective action; and	(1) Performing VE observations of the DIFF or DLS/FF stack at the frequency specified in §63.8620(e) using Method 22 of 40 CFR part 60, appendix A-7; and maintaining no VE from the DIFF or DLS/FF stack; or (2) Maintaining your kiln temperature profile; for any incidence where the kiln is out of control (<i>i.e.</i> , exceeds its temperature profile), performing VE observations of the DIFF or DLS/FF stack as specified in §63.8620(e) using Method 22 of 40 CFR part 60, appendix A-7; and observing no VE from the DIFF or DLS/FF stack.
		ii. Verifying that lime is free-flowing via a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system, or other system; recording all monitor or sensor output, and if lime is found not to be free flowing, promptly initiating and completing corrective actions in accordance with your OM&M plan; recording the feeder setting once each shift of operation to verify that the feeder setting is being maintained at or above the level established during the HF/HCl performance test in which compliance was demonstrated.	

2. Tunnel or roller kiln equipped with a WS.	a. Each emission limit in Table 1 to this subpart and each operating limit in Item 2 of Table 2 to this subpart for kilns equipped with WS.	i. Collecting the scrubber liquid pH data according to §63.8600(a); reducing the scrubber liquid pH data to 3-hour block averages according to §63.8600(a); maintaining the average scrubber liquid pH for each 3-hour block period at or above the average scrubber liquid pH established during the HF/HCl performance test in which compliance was demonstrated; and	
		ii. Collecting the scrubber liquid flow rate data according to §63.8600(a); reducing the scrubber liquid flow rate data to 3-hour block averages according to §63.8600(a); maintaining the average scrubber liquid flow rate for each 3-hour block period at or above the highest average scrubber liquid flow rate established during the HF/HCl and PM performance tests in which compliance was demonstrated.	
3. Tunnel or roller kiln equipped with an ACI system.	Each emission limit in Table 1 to this subpart and each operating limit in Item 3 of Table 2 to this subpart for kilns equipped with ACI system.	Collecting the carbon flow rate data according to §63.8600(a); reducing the carbon flow rate data to 3-hour block averages according to §63.8600(a); maintaining the average carbon flow rate for each 3-hour block period at or above the highest average carbon flow rate established during the Hg and dioxin/furan performance tests in which compliance was demonstrated.	
4. Tunnel or roller kiln intending to comply with dioxin/furan emission limit without an ACI system.	Each emission limit in Table 1 to this subpart and each operating limit in Item 4 of Table 2 to this subpart for kilns intending to comply with dioxin/furan emission limit without an ACI system.	Collecting the operating temperature data according to §63.8600(a); and maintaining the operating temperature at or below the highest operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.	Collecting the operating temperature data according to §63.8600(a); reducing the operating temperature data to a 12-hour block average; and maintaining the average operating temperature for each 12-hour block period at or below the highest operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.
5. Tunnel or roller kiln with no add-	a. Each emission limit in Table 1 to this subpart and	i. Performing VE observations of the stack at the frequency specified in §63.8620(e) using Method 22 of	(1) Maintaining your kiln temperature profile; for any incidence where the kiln is out of

on control	each operating limit in Item 5 of Table 2 to this subpart for tunnel or roller kilns with no add-on control.	40 CFR part 60, appendix A-7; and maintaining no VE from the stack; and	control (<i>i.e.</i> , exceeds its temperature profile), performing VE observations of the DIFF or DLS/FF stack as specified in §63.8620(e) using Method 22 of 40 CFR part 60, appendix A-7; and observing no VE from the stack.
		ii. If your last calculated total facility maximum potential HCl-equivalent was not at or below the health-based standard in Table 1 to this subpart, collecting the kiln process rate data according to §63.8600(a); reducing the kiln process rate data to 3-hour block averages according to §63.8600(a); maintaining the average kiln process rate for each 3-hour block period at or below the kiln process rate determined according to §63.8595(g)(1); and	
		iii. Collecting the operating temperature data according to §63.8600(a); and maintaining the operating temperature at or below the highest operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.	(1) Collecting the operating temperature data according to §63.8600(a); reducing the operating temperature data to a 12-hour block average; and maintaining the average operating temperature for each 12-hour block period at or below the highest operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.
6. Glaze spray operation equipped with a FF.	Each emission limit in Table 1 to this subpart and each operating limit in Item 6 of Table 2 to this subpart for glaze spray operations equipped with a FF.	If you use a bag leak detection system, initiating corrective action within 1 hour of a bag leak detection system alarm and completing corrective actions in accordance with your OM&M plan; operating and maintaining the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; in calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted; if corrective action is required, each alarm is counted as a minimum of 1 hour; if you take longer than 1 hour to initiate corrective action, the alarm time is counted as the actual	Performing VE observations of the FF stack at the frequency specified in §63.8620(e) using Method 22 of 40 CFR part 60, appendix A-7; and maintaining no VE from the FF stack.

		amount of time taken by you to initiate corrective action.	
7. Glaze spray operation equipped with a WS.	a. Each emission limit in Table 1 to this subpart and each operating limit in Item 7 of Table 2 to this subpart for kilns equipped with WS.	i. Collecting the scrubber pressure drop data according to §63.8600(a); reducing the scrubber pressure drop data to 3-hour block averages according to §63.8600(a); maintaining the average scrubber pressure drop for each 3-hour block period at or above the average pressure drop established during the PM performance test in which compliance was demonstrated; and	
		ii. Collecting the scrubber liquid flow rate data according to §63.8600(a); reducing the scrubber liquid flow rate data to 3-hour block averages according to §63.8600(a); maintaining the average scrubber liquid flow rate for each 3-hour block period at or above the average scrubber liquid flow rate established during the PM performance test in which compliance was demonstrated.	
8. Glaze spray operation equipped with a water curtain.	a. Each emission limit in Table 1 to this subpart and each operating limit in Item 8 of Table 2 to this subpart for kilns equipped with a water curtain.	i. Conducting daily inspections to verify the presence of water flow to the wet control system; and	
		ii. Conducting annual inspections of the interior of the control equipment (if applicable) to determine the structural integrity and condition of the control equipment.	
9. Glaze spray operation equipped with baffles.	Each emission limit in Table 1 to this subpart and each operating limit in Item 9 of Table 2 to this subpart for kilns equipped with baffles.	Conducting an annual visual inspection of the baffles to confirm the baffles are in place.	
10. Spray dryer	Each emission limit in Table 1 to this subpart and each operating limit in Item 10 of Table 2 to this subpart for spray dryers.	Collecting the operating temperature data according to §63.8600(a); reducing the operating temperature data to 4-hour block averages according to §63.8600(a); maintaining the average operating temperature for each 4-hour block period at or above the average operating temperature established during the	

		dioxin/furan performance test in which compliance was demonstrated.	
11. Floor tile press dryer	Each emission limit in Table 1 to this subpart and each operating limit in Item 11 of Table 2 to this subpart for floor tile press dryers.	Collecting the operating temperature data according to §63.8600(a); reducing the operating temperature data to 4-hour block averages according to §63.8600(a); maintaining the average operating temperature for each 4-hour block period at or below the average operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.	
12. Sanitaryware shuttle kiln	a. Minimize HAP emissions.	i. Maintaining records documenting your use of natural gas, or an equivalent fuel, as the kiln fuel at all times except during periods of natural gas curtailment or supply interruption; and	
		ii. If you intend to use an alternative fuel, submitting a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in §63.8665; and	
		iii. Submitting a report of alternative fuel use within 10 working days after terminating the use of the alternative fuel, as specified in §63.8635(g); and	
		iv. Using a designed firing time and temperature cycle for each sanitaryware shuttle kiln; and	
		v. For each firing load, documenting the total tonnage of greenware placed in the kiln to ensure that it is not greater than the maximum load identified in Item 1.a.iii of Table 3 to this subpart; and	
		vi. Following maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices, controls that regulate air-to-fuel ratios, and controls that regulate firing cycles; and	

		vii. Developing and maintaining records for each sanitaryware shuttle kiln, as specified in §63.8640.	
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[FR Doc. 2018-17933 Filed: 8/17/2018 8:45 am; Publication Date: 8/20/2018]